[0389] at least one compound C2 having at least two thiol functional groups;

[0390] at least one compound C3 having at least one carbon-carbon double bond;

[0391] at least one photoinitiator; and

[0392] optionally at least one stabilizer.

[0393] Embodiment 35. Use of a kit as defined in embodiment 34 for preparing a resin composition for use as or in an ink.

[0394] Embodiment 36. A printing method comprising the steps of

[0395] providing a first ink portion comprising at least one compound C1 having at least one terminal alkyne functional group and at least one compound C3 having at least one carbon-carbon double bond;

[0396] providing a second ink portion comprising at least one compound C2 having at least two thiol functional groups;

[0397] wherein at least one of the first and the second ink portion further comprises at least one photoinitiator;

[0398] forming a resin composition from the first and the second ink portion, immediately followed by irradiating at least a part of the resin composition with an energy-carrying activation beam so as to cause polymerization of the at least a part of the resin composition and so as to obtain a polymer.

[0399] Embodiment 37. The printing method according to embodiment 36, wherein at least one of the first and the second ink portion further comprises at least one stabilizer.

[0400] Embodiment 38. The printing method according to embodiment 36 or 37, wherein the method further comprises the step of

[0401] heating the first ink portion and/or the second ink portion, in particular before and/or upon providing the first ink portion and/or the second ink portion.

[0402] Embodiment 39. A printing method comprising the steps of

[0403] providing a resin composition as defined in any one embodiments 1 to 32; and

[0404] irradiating at least a part of the resin composition with an energy-carrying activation beam so as to cause polymerization of the at least a part of the resin composition and so as to obtain a polymer.

[0405] Embodiment 40. The printing method according to embodiment 39, wherein the method further comprises the step of

[0406] heating the resin composition, in particular before and/or upon providing the resin composition.

[0407] Embodiment 41. The printing method according to any one of embodiments 36 to 40, wherein the printing method is a three-dimensional printing method.

[0408] Embodiment 42. The printing method according to embodiment 41, wherein the three-dimensional printing method is any one selected from the group consisting of stereolithography (SLA), two-photon absorption (TPA) polymerization, digital light processing (DLP), reactive laser sintering (RLS), solid ground curing (SGC), multi jet modeling (MJM) or a combination thereof.

[0409] Embodiment 43. The printing method according to any one of embodiments 36 to 42, further comprising a step of post-curing the polymer during and/or after irradiating the at least part of the resin composition.

[0410] Embodiment 44. The printing method according to any one of embodiments 36 to 43, wherein the energy-carrying activation beam comprises electromagnetic radiation, in particular selected from the group consisting of ultraviolet radiation and visible light radiation.

[0411] Embodiment 45. The printing method according to any one of embodiments 36 to 44, wherein the printing method is a solvent-free printing method.

[0412] Embodiment 46. The printing method according to any one of embodiments 36 to 45, further comprising a step of cleaning the polymer.

[0413] Embodiment 47. The printing method according to embodiment 46, wherein the step of cleaning comprises contacting the polymer with a cleaning composition comprising an alkaline compound, a surfactant and an appropriate solvent.

[0414] Embodiment 48. A polymer obtainable by the printing method according to any one of embodiments 36 to 47.

[0415] Embodiment 49. An article comprising or formed from the polymer according to embodiment 48.

[0416] Embodiment 50. The article according to embodiment 49, wherein the article is a medical device or a biomedical device, in particular selected from the group consisting of an implant, a bone substitute, a tissue substitute and a dental product.

[0417] Embodiment 51. The article according to embodiment 49 or 50, wherein a surface of the article is modified by a coating, in particular an antimicrobial coating.

[0418] Embodiment 52. The article according to any one of embodiments 49 to 51, wherein the article is a shape memory article.

[0419] Embodiment 53. Use of a polymer according to embodiment 48 or of an article according to any one of embodiments 49 to 52 in a medical or biomedical application.

[0420] Embodiment 54. The use according to embodiment 53, wherein the medical or biomedical application comprises any one selected from the group consisting of an implantation, a bone substitution or replacement, a tissue substitution or replacement, and a dental application.

[0421] Embodiment 55. A composition comprising:

[0422] at least one compound C1 having at least one terminal alkyne functional group and/or at least one compound C3 having at least one carbon-carbon double bond;

[0423] at least one compound C2 having at least two thiol functional groups; and

[0424] at least one stabilizer selected from the group consisting of a radical scavenger, a phosphorous containing compound and a complexing agent.

[0425] Embodiment 56. The composition according to embodiment 55, wherein the at least one stabilizer comprises at least one radical scavenger, in particular at least one phenolic radical scavenger.

[0426] Embodiment 57. The composition according to embodiment 55 or 56, wherein the at least one stabilizer comprises at least one phosphorous containing compound, in particular at least one phosphonic acid and/or at least one phosphoric acid and/or a derivative thereof.

[0427] Embodiment 58. The composition according to any one of embodiments 55 to 57, wherein the at least one stabilizer comprises at least one complexing agent, in particular at least one aromatic azo compound, more specifi-